

## THE SPLIT LOG DRAG

USE AND LIMITATIONS OF THIS DEVICE IN CARING FOR ROADS.

USE FOR CONVICT LABOR

Dragging Should Always Be Done Just After a Rain—Good Road Is One That Is Good and Usable 365 Days in Year.

By HOWARD H. GROSS.

There is no road implement that will do more to make bad roads better than the split log drag, and none that is so inexpensive. A handy man can usually get up one at a cost of \$3 or \$4. Better ones can be bought of road machinery companies for \$8 to \$15. There is no patent on it, so there is

carry just enough weight so it will smooth the surface and fill the ruts without clogging the drag with an accumulation of mud before it. It should iron out and smooth the road without disturbing more than surface projections. Its main use is to fill the ruts and keep the center of the road to the proper crown so the water will readily find its way into the ditches.

The attempt to have the farmers voluntarily drag the road by their farms, or by co-operation have all the roads dragged, will never work out satisfactorily. Some will respond and do their duty, but the human hog must be reckoned with—the one who is supremely selfish, and takes pleasure in overturning the good work of another sometimes just to be mean—pure cussedness. The writer was told of an incident that illustrated this perverseness. A coarse grained middle aged man was heard to say: "T'other day I was coming back from town and I seen old man Jones out with a road drag in the rain—you'd a thought he owned the road. Say, you ought to a seen that road when me and Jake dry over it."

whereon one may ride or drive with pleasure or have a full load without strain upon the horse, vehicle or harness.

To do this the road must have a hard, smooth surface and offer the minimum of resistance. This requires the surface to be "metaled," as the English say, i. e., covered with gravel, broken stone or an equivalent.

An earth road may be an excellent one today and tomorrow a very bad one. It may be a delight in June and a fright in March. Such roads have the virtues of a balky horse—they are liable to fall when most wanted. With a stone or gravel road, leading from the farm, should a heavy rain occur in the busy season, when for a day or so it is too wet to go into the field, the errands to town may be done, several loads of grain or hogs taken to market, and the time well employed. With the average earth roads, when the fields are too wet to work, the roads are too muddy to travel. Hence, the writer holds to the opinion above expressed, that no earth road is entitled to be called a good road, because so much of the time it is positively bad.

The extravagant claims that have been made for the road drag are really holding back the building of good roads. Many have believed that all that was required to have good roads was to go up and down a streak of mud once or twice, say "Presto," and behold, a good highway. This is sheer nonsense. The loud acclaim of a "River to River Road," made good in an hour or so is a myth. This famous road was greatly improved by the dragging, but it is not a good road, and never will be until it is thoroughly drained, properly graded and has a hard, durable wearing surface placed upon it.

It is human nature to hunt for some easy, cheap and speedy way to do things, and usually no sooner has one discovered how to make some progress toward a solution, than he announces a complete revolutionary discovery that sets aside all experience and precedent, and gains something for nothing. The split log drag is directly in point.

The people may as well make up their minds now, as to find out later, that good roads cost money and lots of it, but they are worth many times their cost and they will pay for themselves over and over again every decade. A well drained and well built macadam road with a good binder may cost anywhere from \$4,000 to \$6,000 per mile, but such a road with moderate repairs will last for generations. Hence the future should bear part of the burden. There is only one sensible, businesslike way to build good roads, and that is, by state aid, where by the state, preferably from a long time low rate bond issue, pays part of the expense, and the township issues bonds, running from 20 to 30 years, for its part. In this way all the roads needed in a township—the main roads—can be improved at once, and the payments spread over the present and the coming generations.

By building all at once from ten to twenty per cent. can be saved in the cost of the work, and the community has the roads to use from the start. Of course interest must be paid on the bonds, but against this goes the use of the roads. If this is not worth more than the interest it is better not to build the roads. The road question is a big one and must be handled in a big way.

### ALMOST CAPTURED BIG PRIZE

McCurdy Was Within Ten Miles of Havana When the Lubricating Oil Gave Out.

Aboard the Paulding a seaman, having no glasses at all, shouted:

"There he is!"

There he was, two streaks of black against the sky. He had come over the slow boats, passed all the destroyers except the Paulding, and was sailing surely toward a waiting Havana, with only one destroyer—a more ten minutes or so—between. McCurdy's two mechanics aboard the Paulding began to grin. Make it! Of course he would! Everything was evidently working well; and ten minutes—only ten minutes—would see the man landed safely in Havana, with the big prize to his credit. McCurdy was coming strong. Every moment he was growing blacker and bigger against the sky.

The Cuban coast—the smoke of the city was within sight.

And then—

"My God!" somebody said, "he's fallen."

This was true. The man had fallen. There was no bird-like speck in the sky. The man had fallen. The Paulding was already turning, at 23 knots, to pick him up; and the Terry was steaming straight on for the same purpose. There had been an accident; the lubricating oil had slipped away and the engine was burning to pieces. There was nothing for it but to descend; and this McCurdy did deliberately, waiting patiently, as he stood on the seat of the airship, for rescue. When a boat from the Terry picked him up—the Paulding was only a moment later—he said:

"Dashed hard luck! Why, I could see Havana!"

He was only ten miles off.

"Dashed hard luck!" he repeated.

He hadn't wet his feet—Norman Duncan, in Harper's Weekly.

Quite Literal.

She (indignantly)—Look at this piece of goods which has just come out of the wash! How could the man who sold it to me tell me the colors were fast?

He—I suppose because he knew how they could run.

## With the World's Workers

REVIEW OF PROGRESS THAT IS BEING MADE ALONG ALL LINES OF ENDEAVOR

### WOES OF THE MISFIT

Those Who Labor at Uncongenial Tasks Surely Are Entitled to Sympathy.

#### CASE OF TURNING GRINDSTONE

Successful One Not Always Able to Understand the Situation of the Other—Determination and Pluck, However, Will Generally Win.

A successful woman and a misfit were having a serious conversation in the corner of an office in which the former had at last edged into the position of manager and the other was backsliding to out-of-a-job.

"Don't you see," argued the first with infinite compassion for the erratic habits of the second, "the easiest and most natural way to succeed is to stick and plod and never say die at the work set before you. You are discouraged too easily."

"That's all you know about it," said the misfit as she sat checking items in the help wanted columns. "You haven't seen or sensed all the thoughts back of my bumps. You don't seem to know what a purgatory it is to be drudging at any old thing that comes your way, that brings no satisfaction but that of three squares and a chance ice cream soda. When you know what you want and want what you can't get it's hard lines to hold your nose to a grindstone that doesn't appeal to you."

"O, I see your case to a dot," said the successful one knowingly, "and since we've been good friends for many a year, let me tell you frankly that you're on the wrong track just the same. Almost every soul living has some pet scheme and dear idea nesting in his brain; but if he is not ready to make sacrifices and stand fire for the sake of it he can never make it go. One needs common sense more than fine sensibilities, you know. Why don't you work up into a good paying job and stick to it until you have money enough to go after what you want?"

"Why don't I?" echoed the misfit. "Well, I could give you a dozen chapters on that, but they wouldn't convince you. It isn't mere physical grind I'm afraid of, for I'm not lazy. But the idea that I could use my time at something that would prove more profitable in the end and bring me some real satisfaction is a constant plague to me. I always want to run away from such feelings and generally I do. For a while I tackled the work for which I am fitted and which I love, but when the immediate coin is necessary I switch back to job hunting. Don't you ever tell me again I'm easily discouraged?"

"You should take yourself in hand and get more practical," returned the other. "You will always be unhappy unless you will settle down to something in particular. You should—"

"That something in particular which was all outlined before I was 14 years old," interrupted the misfit, "will claim me in the end, for I know I'll get there some time. Until I can make that work I might as well shift about and get all the knowledge and experience I can pocket."

"Everybody is hinting to me what awfully poor principle it is—it looks bad and shiftless, but after all I myself ought to know best. I know what I'm laying for. Any way it's just as heroic to take this risk as to settle down to work that will take all the sap out of me and give me no consolation. The advice of the wisest couldn't change my course."

Wrong Industrial Conditions.

Industrial conditions should be shaped to give the fullest life to workers, not that lives of workers should be given to bringing fullest developments of the industry. The man is more than the machine. At present we are setting up industry and making a god of it, and human sacrifices are offered it. We need to get a bigger outlook than this, and recognize that industry is the servant and man the master. And now that women are becoming so much a part of industry, conditions in this industrial world are becoming woman's concern as well as man's.

Every woman should add her influence in whatever form it may take to help mend them. No woman should be asked to give up the work she is fitted to do, or which she delights in doing, or else to give up marriage, in order that the industrial machine may grind out a few more dollars for the owner of some particular part of it. Something is wrong when such conditions exist. Every man and every woman has a right to happiness and to a living, and the conduct of society should be so shaped as to further, not prevent, this end.

### HERE'S HARD PROBLEM

BUSINESS MAN IN MORE THAN USUAL TROUBLE.

What is to Be Done With Careless Worker Who Is of Exceptional Value in Emergencies?

"I have half a dozen stenographers in my office," said a business man recently, "and the one I value most highly is the one with whom I have the most trouble. That sounds rather odd, but it's a fact. I like this girl because I can depend on her to go the limit when there is a pinch of work which must be got out."

"The other girls in the office are nice, tractable girls of fair ability. They get down as early as they think they have to in the morning, and they work along till closing time with a fair amount of diligence. Their work is usually up to the standard I require, and they observe the office regulations most of the time. pretty close to earning what I pay them."

"But the sixth girl is different. She is the brightest of the lot when she wants to be, but at times her work is slovenly almost beyond endurance. She calmly forgets to do what she's told to do, and she frequently calls up of a morning to say she won't be down because she's busy at home, sick or dying. She can be a regular high-binder when she wants to, and she irritates me excessively now and then. But all the time I'm afraid she'll do something so bad I'll have to fire her, and that would be a calamity."

"She's one of the occasional girls who'll break her back to save the house in an emergency. She's careful to confine her misbehavior to hum-drum days and seasons. Her disposition is such that she can't take much interest in things while they're going like clockwork, but let something break, and she's on the job in a minute. Some sudden, unexpected rush of orders, some blunder that must be covered up, anything that involves the reputation of the house, and her success, and she jumps into the harness like a little gray horse. She goes about the office on the run, her typewriter fairly smokes with the speed she puts into it. She'd be the first one to suggest working all night if something had to be done."

"The trouble with the other girls is they don't take a real interest in the business. They are never bad, but they are never very good. If they knew the house was in the crisis of its existence they would peg along at the same old plodding job trot, and they'd slap down the covers of their typewriters as usual at the first stroke of five."

## Little Stories for Business Women

By NELLIE FRANCES MILBURN

Applying for a Position.

"Say, I wonder how long we will have to wait here?" a high pitched voice broke into the tense silence of the room. Several girls giggled, but no one answered, and the tall, auburn-haired girl who had spoken, began pacing restlessly up and down the corridor.

A manufacturing company had advertised for a stenographer, and over 20 girls were waiting when the office boy came to open the office, and every few moments a new applicant would appear.

All the chairs in the outer room were occupied, several girls were seated on the window sills, and others were leaning against the big table or standing about the hall.

The bookkeeper and his assistant had already arrived and passed into the private office, but as yet no member of the firm was on hand. Anna Wilson stood timidly near the outer door. She had been one of the first comers and was growing every moment more disheartened as she noted the many applicants and contrasted her shabby, country made clothes with the stylish and dashing garments worn by most of the girls.

The big, auburn-haired girl, who was attired in a bright blue silk suit with a large black hat trimmed with ostrich plumes attracted admiring glances as she strode about.

Anna herself was dressed in a last year's black serge gown, with a plain little black turban and her hair neatly rolled and braided.

Now a small, slender woman with gray hair, and garbed in quiet black with a widow's bonnet, came from the elevator, and glancing quickly about, made her way through the crowd and entered the private office.

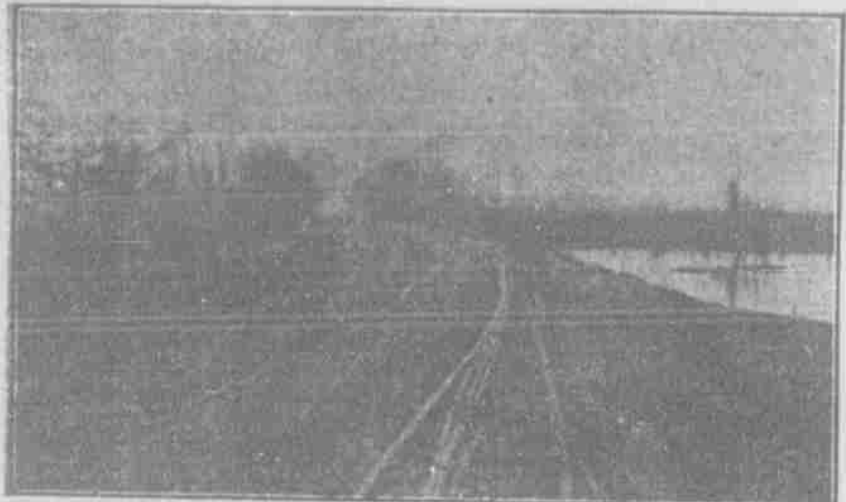
In a few moments the office boy came out bearing slips of paper with numbers on them. Anna was almost ready to give up her chance and go away, when she saw that she had received No. 10, and observed that the big auburn-haired girl, who had No. 1, pushed into the inner room with a triumphant air. However, she came out again almost instantly with her face flushed and angry and flounced out to the elevator. Others followed in rapid succession. When Anna's number was called she entered the room timidly and saw the gray-haired lady.

She arose with a friendly smile and greeted Anna pleasantly. "I am the head stenographer here," she stated, "and the manager has asked me to examine the applicants. Where did you study? Have you had any experience in office work?"

Anna answered her somewhat bashfully. The lady then stepped to the telephone and called up the business college, asking a few rapid questions. "That's all right," she concluded, emphatically, and turning to Anna, announced: "The salary is six dollars a week to begin with, and a raise of two dollars at the end of the first month. Can you go to work right away?"

"Why, yes," Anna stammered, "but don't you want to test my speed?"

"No," answered the lady, decisively. "You will not have much to do at first, and I will dictate to you and look over your letters. The business college recommends you highly, and that is sufficient. In fact, the first requisite with the firm is that a girl shall be quiet and ladylike and willing to learn. I noted your appearance as I saw you in the outer room, and I approve of the inconspicuous and neat way you are dressed. I would not consider for a moment one of those loud-talking, overdressed, self-sufficient girls whom I interviewed first. Now take off your hat and take your place at the desk next to mine." And this was the beginning of a pleasant, helpful friendship and satisfactory business relationship. (Copyright, 1916, by Joseph E. Bowles.)



Road After Being Dragged One Year—Helena, Ark.

The above road for many years was impassable a large part of the time. A few years ago it was graded as shown—not very well done, however. The surface has been dragged at short intervals for a year. This has kept the road comparatively smooth. While it cannot be called a good road, it is a good example of how a very bad road may be made better with grading and dragging. This road is in Arkansas.

no reason why they should not come into general use.

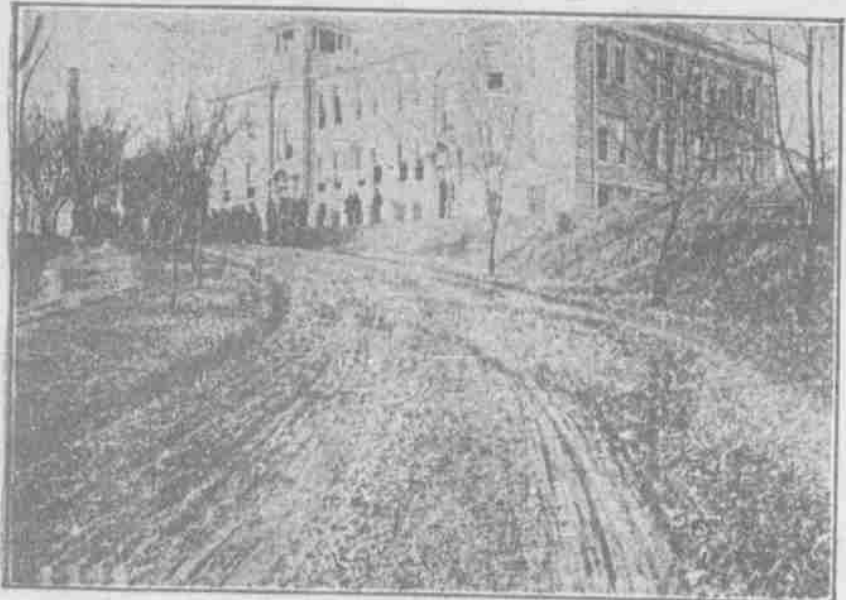
The problem of supplying prisoners with work that shall not compete unfairly with free labor is not yet solved. Here, however, is an article that can be readily made to advantage in the penitentiary and it would be well to have a few thousand turned out.

The writer desires in the outset to correct a misconception that seems quite general, and that is, that the split log drag is a solution of the good roads problem. It is nothing of the

You wouldn't s'posed it had ever seen a drag. Jones was hot when he seen us coming. He tore around like a crazy man. We wouldn't row with an old man, so we give him the ha! ha! and went on."

It is no use to drag a road and then cut it up again. Let all such work as dragging be done and paid for and make it a heavy fine for any one to drive over a dragged road until it is dry enough so it will not cut up.

Gravel roads while new and compacting under the traffic show deep



Road Before Dragging at Columbia, Mo.

This illustration shows a newly made macadam road going through the rutting period. This road apparently was not thoroughly rolled when built. Another illustration shows the same road with the surface ironed-out with a road drag. This is a good example of the value of the road drag on a macadam roadway. This road is at Columbia, Mo.

kind. It has its uses and its limitations. Unfortunately, the man who made it, and for which the country is under obligations, overshoots the mark in his slogan: "Good Roads Without Money." The drag is doing good work—it is a pity the inventor is not satisfied to put it and leave it where it belongs.

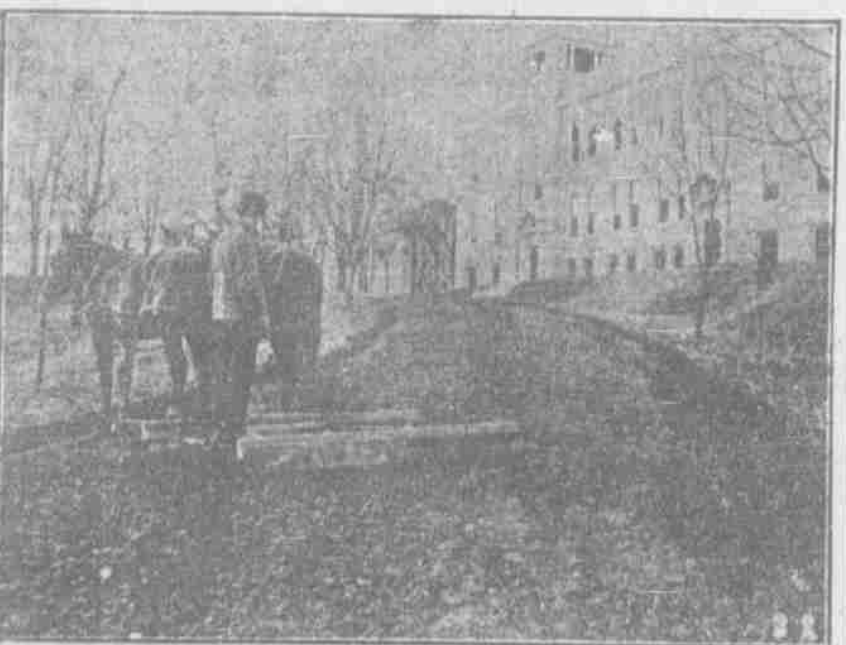
The drag is not only useful for earth roads, but serves an excellent purpose in keeping gravel roads in condition, and it may be used at times on macadam roads to advantage.

Dragging should always be done in or just following a rain. The surface should be quite wet. The drag should

run along the wheel track and less ones made by the feet of the horses. When in this condition one or two round trips with the drag will fill the ruts and reform the surface and in doing so will move very little material. The forward movement of the drag should be at an angle so that when the material is pushed forward it is also carried to the center of the road.

The office of public roads will furnish bulletins upon the use of the road drag free upon application. Road officials and others would do well to send for them.

A good road is one that is good and usable 365 days in the year; a road



Result of 30 Minutes' Use of Drag at Columbia, Mo.

Macadam road not consolidated being put in shape with a road drag. Note the drag has filled the ruts and moved the loose material towards the center of the roadway. The drag goes forward at an angle for this purpose. The road drag should be used upon gravel or macadam roads only when the road is wet and when it is desirable to fill up ruts.